

Full Service Customers

Nonconverted Transmission

BPA Scheduling Coordinator Services Briefing

February 6, 2002





What is our purpose today?

◆ **Meeting Purpose:**

- ✓ Explain SC services.
- ✓ Answer questions and address issues.
- ✓ Solicit customer comments and feedback aimed at assisting BPA with SC development.



What are our key messages?

- ◆ Under RTO West, an SC is required.
- ◆ BPA will operate as an SC for our contracts with you.
- ◆ BPA will meet certain requirements set by RTO West.
- ◆ Cost of SC services depends on how well we can manage costs and risks.
- ◆ For its Full Service customers, BPA will provide RTO West with balanced schedules, secure ancillary services and manage congestion.
- ◆ BPA intends to be your SC and life won't change much.



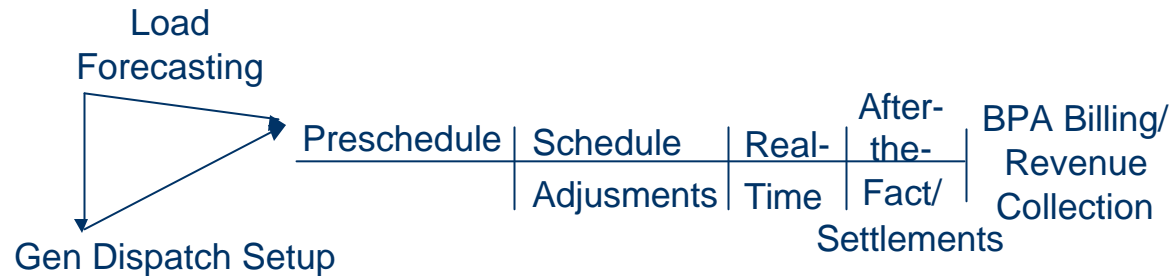
What are the specific responsibilities of RTO West?

- ◆ RTO West will market transmission and will coordinate transmission operation for purposes of system reliability, improved schedule coordination and expansion planning.
- ◆ Specific responsibilities include:
 - Provide single open-access same-time information system (OASIS).
 - Determine total and available transmission capacity.
 - Manage real-time operation of grid.
 - Honor pre-existing transmission contract obligations.
 - Eliminate fragmented operations of separate systems.
 - Remove transmission rate pancakes.
 - Assure functional markets for developing transmission capacity.
 - Establish operational and business relationships with SCs.

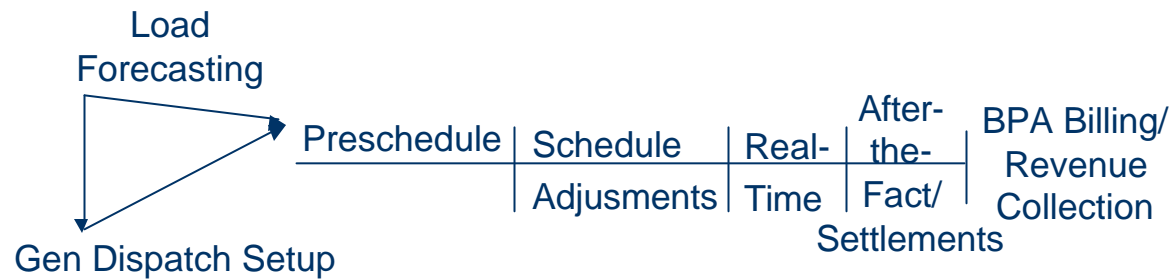


How does Full Service look **today**?

POWER

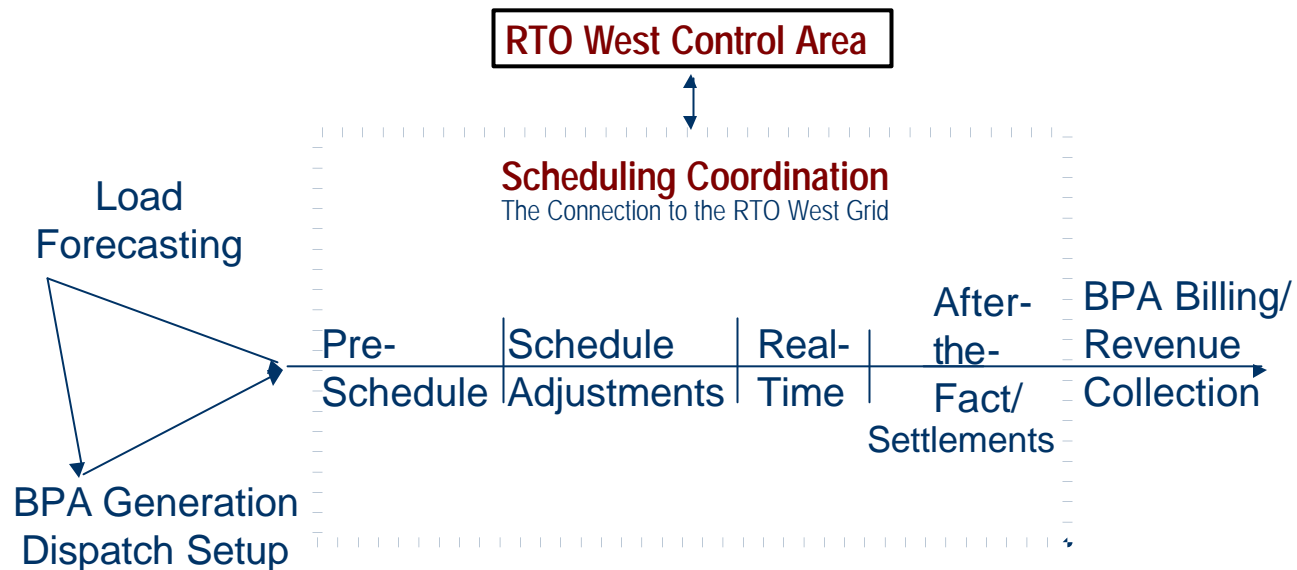


TRANSMISSION





What will BPA Full Service transactions look like **post-RTO**?





Why are Scheduling Coordinators important?

- ♦ Only RTO West-certified SCs may transact business with the RTO.
- ♦ Submit balanced load and generation schedules to RTO West.
- ♦ Manage customer transactions with RTO to ensure effective real-time management and operation of the regional transmission grid.



Will BPA be the SC for your contracts?

Full Service Customers

	Generation	Load	Ancillary Services
Now	Y	Y	Y
Post-RTO	Y	Y	Y

BPA will continue to provide all services it does today and any new services required by the RTO.



What are the SC's specific responsibilities under RTO West?

- ◆ SCs will:
 - Submit hourly balanced schedules (injections and withdrawals) on the customer's behalf to RTO West.
 - Manage load/generation under SC control.
 - Manage transactions with other SCs.
 - Make schedule adjustments after preschedule.
 - Respond to RTO West control area concerns and instructions.
 - *For example, respond to generation redispatch instructions.*
 - Handle billing & financial settlement with RTO West.
 - Arrange ancillary services needed for full service according to contract.



Will my transmission rights change under RTO West?

- ♦ All existing long-term contract rights will continue to be honored using a “catalogue” of rights and assets provided to RTO West by BPA.
- ♦ BPA SC will hold the catalogued transmission rights (CTRs) for those not converting.
- ♦ Customers needing new points-of-delivery, operations, maintenance and other delivery services would continue to request those services from BPA.



How will ancillary services be handled under RTO West?

RTO West will:

- ♦ Replace BPA and other participating transmission owners as the current control area operator and assume responsibility for operation of the grid.
- ♦ Serve as the provider of last resort of all ancillary services.
- ♦ Support the development of a competitive market for ancillary services.



What changes will occur with or without RTO West?

- ♦ Transmission congestion is likely to increase, as will the need to manage congestion.
- ♦ New facilities need to be built to meet demand and address reliability concerns.
- ♦ System efficiency will require accurate load forecasts and schedules for each customer.
- ♦ Better regional coordination of transmission planning will be needed for cost-efficient results.



What will SC activities cost?

- ♦ BPA is developing cost estimates for operating an SC function.
- ♦ However, the largest cost exposure is that associated with system congestion costs and imbalance charges. The SC is responsible for keeping these costs at a minimum.
- ♦ BPA is actively involved in helping to shape RTO West such that customer costs are minimized.



What risks will the SC manage?

- ◆ Principle risks associated with growing congestion (regardless of whether RTO West is formed) are:
 - Load imbalance charges
 - Generation imbalance charges
 - Congestion costs
- ◆ Reward for effective SC risk management is cost efficiency and avoidance of RTO West penalty charges.



What are BPA's key principles in developing the SC function?

- ◆ Utilize existing information technology systems where possible.
- ◆ Provide services at cost.
- ◆ Fairly allocate risk between BPA and SC customers.
- ◆ Keep life as simple as possible for Full Service customers.



What are the organizational impacts to BPA?

- ♦ BPA plans to offer all SC service under one organization.
- ♦ SC functions will require BPA to better manage congestion risks.
- ♦ BPA will design the customer processes to ensure business with the SC is made easy.
- ♦ BPA will provide “SC business practices” to detail how BPA will interact with Full Service customers.
- ♦ BPA will seek customer input on its proposed SC organizational design.



How does a customer work with a Scheduling Coordinator?

- ♦ BPA will work with its customers to develop the information necessary for the SC to carry out its functions:
 - Load forecasts
 - Load information
 - Meter data



What are the key take-away messages of today?

- ♦ Under RTO West, an SC is required.
- ♦ BPA will operate as an SC for our contracts with you.
- ♦ BPA will meet certain requirements set by RTO West.
- ♦ Cost of SC services depends on how well we can manage costs and risks.
- ♦ For its Full Service customers, BPA will provide RTO West with balanced schedules, secure ancillary services and manage congestion.
- ♦ BPA intends to be your SC and life won't change much.



Where do we go from here?

- ♦ February 2002 - Conclude this round of SC discussions with Full Service customers.
- ♦ March 2002 - Similar discussions with other types of customers.
- ♦ Summer 2002 – SC services design, cost estimates, pricing and risk management principles, and staffing and system needs.
- ♦ Fall 2002 - Customer workshops, Final Scheduling Coordinator Business Plan.
- ♦ 2003 - SC rates, final SC service design, SC business practices.
- ♦ 2004 - SC start up and testing.
- ♦ 2005 - SC and RTO West implementation.



Where can I go to get more information?

- ♦ Scheduling Coordination website

<http://www.bpa.gov/corporate/kc/schedcoord/>

- ♦ RTO West website

<http://www.rtowest.org/>



Full Service Customers

Nonconverted Transmission

Congestion Management Convergence Model

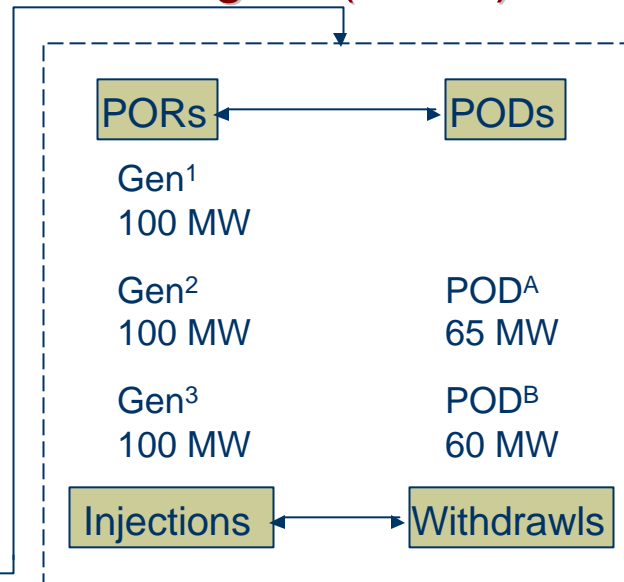
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How will network service work under RTO West?

Catalogued Transmission Rights (CTRs)

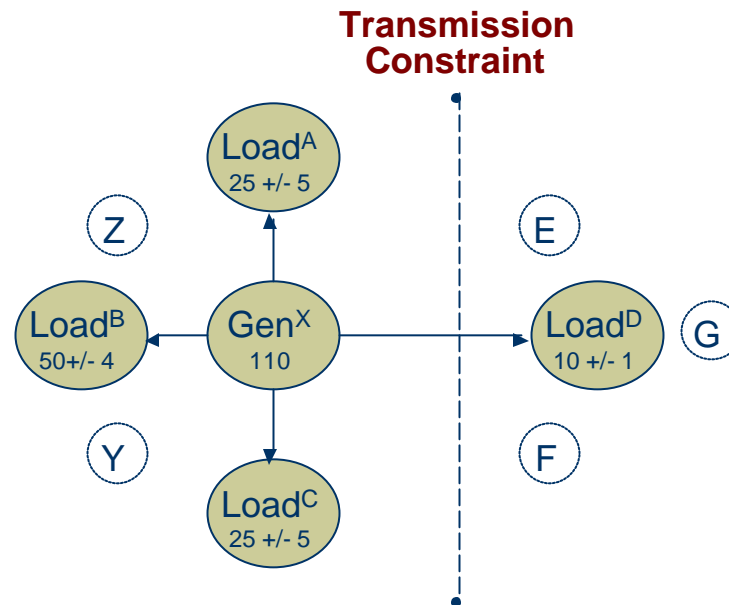
- ♦ Today's Network Transmission Rights are defined by Points of Receipt (PORs) and Points of Delivery (PODs) and are limited in real time by actual load.
- ♦ In the RTO Catalogue, PODs and PORs become "withdrawals" and "injections," respectively.
- ♦ SC submits final schedules:
 - Simultaneous injection & withdrawal pairs cannot exceed load.



Example for a 100 MW peak Customer

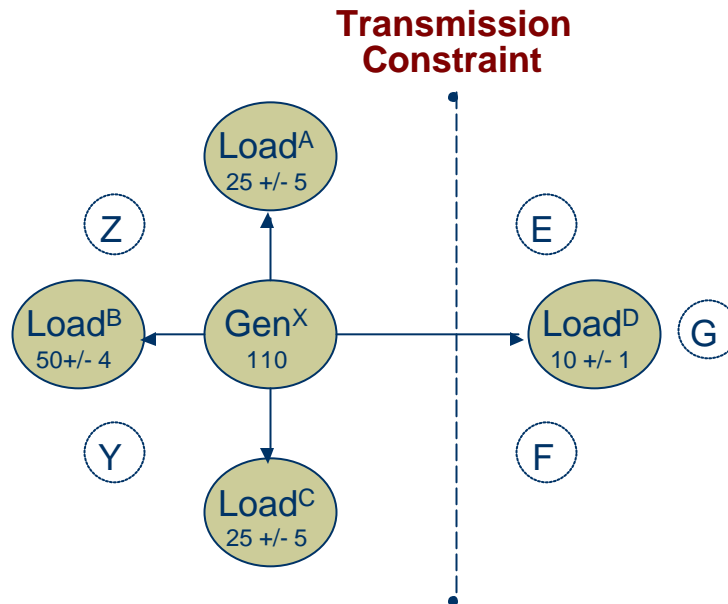


How will congestion management work under RTO West?





How will congestion management work under RTO West?



Exercise

Injections:

110 MW @ X

Withdrawals:

25 MW @ A

50 MW @ B

25 MW @ C

10 MW @ D

Prices:

X = \$20.00

Prices:

A = \$19.80

B = \$20.05

C = \$20.00

D = \$30.00

Congestion

Cost

X → A = \$0

X → B = 5¢

X → C = \$0

X → D = \$10

FTO/CTR

Credit

X → A = \$0

X → B = 5¢

X → C = \$0

X → D = \$10

Net Cost equates to zero for holders of FTOs/CTRs